## WHAT IS CLAIMED IS:

1. A compound represented by the formula

5 and the pharmaceutically acceptable salts, esters and prodrugs thereof, wherein

L is selected from the group consisting of:

- (1) -CH(OH)CH<sub>3</sub>;
- (2) C<sub>1</sub>-C<sub>6</sub> alkyl, optionally substituted with one or more substituents selected from the group consisting of aryl, substituted aryl, heteroaryl and substituted heteroaryl;
  - (3) C<sub>2</sub>-C<sub>6</sub> alkenyl, optionally substituted with one or more substituents selected from the group consisting of aryl, substituted aryl, heteroaryl and substituted heteroaryl; and
  - (4) C<sub>2</sub>-C<sub>6</sub> alkynyl, optionally substituted with one or more substituents selected from the group consisting of aryl, substituted aryl, heteroaryl and substituted heteroaryl;

 $R_1$  is selected from the group consisting of  $C_1$ - $C_6$ -alkyl,  $C_2$ - $C_6$ -alkenyl and  $C_2$ - $C_6$ -alkynyl, each optionally substituted with one or more substituents selected from the group

20 consisting of:

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- (1) halogen;
- (2) aryl;
- (3) substituted aryl;
- (4) heteroaryl;
- 25 (5) substituted heteroaryl;
  - (6) -O-R<sub>5</sub>, where R<sub>5</sub> is selected from the group consisting of:

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- a. hydrogen;
- b. aryl;

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- c. substituted aryl;
- d. heteroaryl; and
- e. substituted heteroaryl;
- (7)  $-O-C_1-C_6$ -alkyl- $R_5$ , where  $R_5$  is as previously defined;
- (8) -O-C<sub>2</sub>-C<sub>6</sub>-alkenyl-R<sub>5</sub>, where R<sub>5</sub> is as previously defined;
- (9) -O-C<sub>2</sub>-C<sub>6</sub>-alkynyl-R<sub>5</sub>, where R<sub>5</sub> is as previously defined; and
- (10) -NR<sub>6</sub>R<sub>7</sub>, where R<sub>6</sub> and R<sub>7</sub> are each independently selected from the group consisting of: hydrogen; C<sub>1</sub>-C<sub>6</sub>-alkyl, optionally substituted with one or more substituents selected from the group consisting of halogen, aryl, substituted aryl, heterocyclic and substituted heterocyclic; C<sub>2</sub>-C<sub>6</sub>-alkenyl, optionally substituted with one or more substituents selected from the group consisting of halogen, aryl, substituted aryl, heterocyclic and substituted heterocyclic; and C<sub>2</sub>-C<sub>6</sub>-alkynyl, optionally substituted with one or more substituents selected from the group consisting of halogen, aryl, substituted aryl, heterocyclic and substituted heterocyclic; or R<sub>6</sub>R<sub>7</sub> taken together with the nitrogen atom to which they are connected form a 3- to 7-membered ring which may optionally contain one or more hetero functions selected from the group consisting of -O-, -NH-, -N(C<sub>1</sub>-C<sub>6</sub>-alkyl)-, -N(aryl)-, -N(heteroaryl)-, -S-, -S(O)- and -S(O)<sub>2</sub>-;

 $R_2$  is selected from the group consisting of:

- (1) hydrogen;
- (2) C<sub>1</sub>-C<sub>6</sub>-alkyl, optionally substituted with one or more substituents selected from the group consisting of:
  - a. halogen;
  - b. aryl;
  - c. substituted aryl;
  - d. heterocyclic;
  - e. substituted heterocyclic;
  - f. -O-R<sub>3</sub>, where R<sub>3</sub> is selected from the group consisting of:
    - i. hydrogen;
    - ii. aryl;
    - iii. substituted aryl;

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	iv. heteroaryl; and
	v. substituted heteroaryl;
	gO-C <sub>1</sub> -C <sub>6</sub> -alkyl-R <sub>3</sub> , where R <sub>3</sub> is as previously defined;
	hO-C <sub>2</sub> -C <sub>6</sub> -alkenyl-R <sub>3</sub> , where R <sub>3</sub> is as previously defined;
5	iO-C <sub>2</sub> -C <sub>6</sub> -alkynyl-R <sub>3</sub> , where R <sub>3</sub> is as previously defined; and
	j. $-NR_6R_7$ , where $R_6$ and $R_7$ are as previously defined;
	(3) C <sub>2</sub> -C <sub>6</sub> -alkenyl, optionally substituted with one or more substituents
	selected from the group consisting of:
	a. halogen;
10	b. aryl;
	c. substituted aryl;
	d. heterocyclic;
	e. substituted heterocyclic;
	fO-R <sub>3</sub> , where R <sub>3</sub> is as previously defined;
15	g. $-O-C_1-C_6$ -alkyl- $R_3$ , where $R_3$ is as previously defined;
	h. $-O-C_2-C_6$ -alkenyl- $R_3$ , where $R_3$ is as previously defined;
	iO-C <sub>2</sub> -C <sub>6</sub> -alkynyl-R <sub>3</sub> , where R <sub>3</sub> is as previously defined; and
	j. $-NR_6R_7$ , where $R_6$ and $R_7$ are as previously defined; and
	(4) $C_2$ - $C_6$ -alkynyl, optionally substituted with one or more substituents
20	selected from the group consisting of:
	a. halogen;
	b. aryl;
	c. substituted aryl;
	d. heterocyclic;
25	e. substituted heterocyclic;
	f. $-O-R_3$ , where $R_3$ is as previously defined;
	g. $-O-C_1-C_6$ -alkyl- $R_3$ , where $R_3$ is as previously defined;
	h. $-O-C_2-C_6$ -alkenyl- $R_3$ , where $R_3$ is as previously defined;
	iO-C <sub>2</sub> -C <sub>6</sub> -alkynyl-R <sub>3</sub> , where R <sub>3</sub> is as previously defined; and
30	j. $-NR_6R_7$ , where $R_6$ and $R_7$ are as previously defined;
	X is selected from the group consisting of:
	(a) S(O)n, where n is 0, 1, or 2;
	(b) O; and

(c)  $NR_5$ , where  $R_5$  is as previously defined;

and

Rp is hydrogen or a hydroxy protecting group.

- 5 2. A compound according to Claim 1 wherein L is CH<sub>2</sub>CH<sub>3</sub>, X is -S-, R<sub>1</sub> is CH<sub>3</sub> and R<sub>2</sub> and Rp are as defined in Claim 1.
  - 3. A compound according to Claim 1 which is selected from the group consisting of:

Compound of formula (I):  $L = CH_2CH_3$ , X = S,  $R_1 = CH_3$ ,  $R_2 = 2$ -[6-(dimethylamino-

10 methyleneamino)purin-9-yl]-ethyl and Rp = H;

Compound of formula (I):  $L = CH_2CH_3$ , X = S,  $R_1 = CH_3$ ,  $R_2 = 2$ -(6-amino-purin-yl)-ethyl and Rp = H;

Compound of formula (I):  $L = CH_2CH_3$ , X = S,  $R_1 = CH_3$ ,  $R_2 = 3$ -(3-pyridinyl)-1H-pyrazole-ethyl and Rp = H;

Compound of formula (I):  $L = CH_2CH_3$ , X = S,  $R_1 = CH_3$ ,  $R_2 = [3-(3-pyridinyl)-1H-1,2,4-triazole-1-yl]-ethyl and <math>Rp = H$ ;

Compound of formula (I):  $L = CH_2CH_3$ , X = S,  $R_1 = CH_3$ ,  $R_2 = = [4-(3-pyridinyl)-1H-imidazole]-1-ethyl and <math>Rp = H$ ; and

Compound of formula (I):  $L = CH_2CH_3$ , X = O,  $R_1 = CH_3$ ,  $R_2 = CH_2CH_2$ -phenyl and Rp = 20 H.

- 4. A pharmaceutical composition comprising a therapeutically effective amount of a compound of Claim 1, or a pharmaceutically-acceptable salt, ester or prodrug thereof, in combination with a pharmaceutically acceptable carrier.
  - 5. A method for controlling a bacterial infection in an animal comprising

administering to an animal a therapeutically-effective amount of a pharmaceutical composition according to Claim 4.

6. A process for preparing a compound represented by the formula

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wherein L, X, R<sub>1</sub>, R<sub>2</sub>, and Rp are as defined in Claim 1, the method comprising

(a) acylating a compound represented by the formula

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wherein L and  $R_1$  are as defined in Claim 1 and  $R_2$  is a hydroxy protecting group, by reaction with a carboxylic acid, optionally in the presence of a catalyst, optionally in the presence of a dehydration reagent and optionally in the presence of a base in an aprotic organic solvent to provide a product represented by the formula

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wherein L, R<sub>1</sub>, and Rp are as defined in Claim 1, and where Y is halogen;

(b) reacting a compound from step a with an anion of  $R_2$ -X-M where  $R_2$  and X are as defined in Claim 1, Rp is a hydroxy protecting group and M is sodium, potassium, or lithium, or  $R_2$ -X-H in the presence of a base in the presence of an aprotic solvent at a

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temperature from -20°C to 50°C for 1-48 hours to provide compound represented by the formula

- 5 wherein L, R<sub>1</sub>, R<sub>2</sub>, Rp and X are as defined in Claim 1; and
  - (c) reacting a compound from step b with a base in organic solvent to effect cyclization to provide a compound of formula (I).

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